

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (canceled)

2. (currently amended) An isolated nucleic acid sequence comprising:

- a) the nucleic acid sequence of SEQ ID NO:1; or
- b) the sacABCDEFGH operon of SEQ ID NO:1; or
- c) the sacA, sacB, sacC, sacD, sacE, sacF, sacG, and sacH genes of SEQ ID NO:1; or
- d) ~~the a nucleic acid sequence encoding the amino acid sequence SEQ ID NO: 2, 3, 4, 5, 6, 7, 8 or 9 SacA, SacB, SacC, SacD, SacE, SacF, SacG, and SacH proteins (SEQ ID NO:2-9) encoded in SEQ ID NO:1;~~ or
- e) ~~the a nucleic acid sequence which that is the full complement to the sequence in a), b), c), or d).~~

3. (canceled)

4. (currently amended) The nucleic acid sequence ~~according to~~ of claim 2, wherein the nucleic acid sequence comprises:

- a) the nucleic acid sequence of SEQ ID NO:1; or
- b) the nucleic acid sequence which is the full complement to the sequence in a).

5-17. (canceled)

18. (previously presented) A vector comprising the nucleic acid sequence of claim 2.

19. (currently amended) The vector according to of claim 18 which is an expression vector.

20. (currently amended) The vector according to of claim 18 which is a cosmid.

21. (currently amended) A recombinant host cell of the *Pseudomonas* genus transformed with  
~~one or more a~~ nucleic acid sequence[[s]] according to of claim 2.

22. (currently amended) A recombinant host cell of the *Pseudomonas* genus comprising a  
transformed with the vector of claim 18.

23-28. (canceled)

29. (withdrawn/currently amended) A method of producing a safracin compound or a safracin analogue comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises a nucleic acid of claims 2 or 4 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium and

c) purifying the safracin or safracin analogue from the culture medium ~~an organism in which expression of genes encoding polypeptides sufficient to direct the synthesis of a safracin or safracin analogue has been modulated by manipulation or replacement of one or more genes or sequence responsible for regulating such expression.~~

30-31. (canceled)

32. (currently amended) A composition comprising at least one nucleic acid sequence ~~according to~~ of claim 2.

33-42. (canceled)

43. (currently amended) The nucleic acid ~~according to~~ of claim 2 wherein the nucleic acid sequence comprises the *sacABCDEFGHI* operon.

44-45. (canceled)

46. (currently amended) ~~The An isolated~~ nucleic acid sequence according to claim 2 which comprises ~~sacA, sacB, sacC, sacD, sacE, sacF, sacG, sacH, sacI and sacJ genes comprising both the~~ sacABCDEFGHI operon and the sacIJ operon of SEQ ID NO:1.

47. (canceled)

48. (currently amended) The nucleic acid ~~according to~~ of claim 46 or 47 wherein the sacI gene of the sacIJ operon is disrupted.

49. (currently amended) The nucleic acid ~~according to~~ of claim 46 or 47 wherein the sacJ gene of the sacIJ operon is disrupted.

50. (currently amended) The nucleic acid ~~according to~~ of claim 46 or 47 wherein the sacI gene of the sacIJ operon is disrupted and the expression of the sacJ gene has been reconstituted.

51. (currently amended) The nucleic acid ~~according to~~ of claim 46 or 47 wherein the sacF gene and/or the sacG gene of the sacABCDEFGH operon has been disrupted.

52. (currently amended) The nucleic acid sequence ~~according to~~ of claim 2 wherein the nucleic acid sequence comprises SEQ ID NO: 1.

53. (currently amended) An isolated nucleic acid sequence comprising:

- a) the nucleic acid sequence of SEQ ID NO:1; or
- b) the sacABCDEFGH operon of SEQ ID NO:1; or
- c) ~~the~~ a nucleic acid sequence ~~which~~ that is the full complement to the sequence in a) or b).

54. (canceled)

55. (new) A recombinant host cell of the *Pseudomonas* genus transformed with the nucleic acid sequence of any one of claims 46, 48, 49, 50, or 51.

56. (new) A method of producing a safracin comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 46 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium and
- c) purifying the safracin from the culture medium.

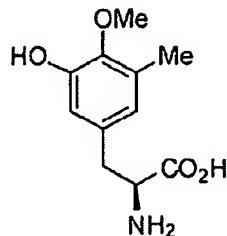
57. (new) A method of producing a safracin analogue comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of any one of claims 48 to 50 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium; and
- c) purifying the safracin analogue from the culture medium.

58. (new) A method of producing a safracin comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 51 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium; and
- c) purifying the safracin from the culture medium;

wherein the culture medium comprises the L-Tyr derivative P2 which has the following structure:



59. (new) A method of producing a safracin analogue comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 51 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium; and
- c) purifying the safracin analogue from the culture medium;

wherein the culture medium comprises the L-Tyr derivative P3 which has the following structure:

